

VITA
MARTHA PATRICIA HAYNES
Goldwin Smith Professor of Astronomy, Cornell University

Current Address: 530 Space Sciences Building
Cornell University
Ithaca, NY 14853
(607) 255-0610
haynes@astro.cornell.edu

Education:

- 1973 B.A. Wellesley College, physics and astronomy, with special honors
1975 M.A. Indiana University, astronomy
1978 Ph.D. Indiana University, astronomy

Professional Employment:

- 1978-80 postdoctoral research associate , National Astronomy and Ionosphere Center,
Arecibo Observatory
1981 research associate, National Astronomy and Ionosphere Center
1981-83 assistant director for Green Bank operations and assistant scientist, National Radio
Astronomy Observatory
responsible for daily operations at rural telescope site with 84 employees, \$3M/yr budget
1983-86 assistant professor, Department of Astronomy, Cornell University
1986-91 associate professor
1991- professor
director of undergraduate study in astronomy (1990-1997, 1998-2002)
associated with the National Astronomy and Ionosphere Center and the Center for
Radiophysics and Space Research

Concurrent Positions:

- 1988 visiting fellow, Australian National University
1989 visiting professor, University of Milano and Astronomical Observatory of Brera
1989 visiting professor, University of Bologna
1990 visiting professor, Astrophysical Observatory of Arcetri
1991-4 collaborative research scientist, National Radio Astronomy Observatory
1997 visiting scientist, European Southern Observatory
1998-9 interim president, Associated Universities, Inc.
responsible for \$40M/yr cooperative agreement with National Science Foundation for
operation of the National Radio Astronomy Observatory and for \$29M design and
development phase of the Millimeter Array (now ALMA)
2005-8 deputy director, National Astronomy and Ionosphere Center

Honors and Fellowships:

- 1989 Henry Draper Medal, National Academy of Sciences
1993 Dean's Award for Excellence in Advising, College of Arts and Sciences, Cornell University
1999 elected to American Academy of Arts and Sciences
2000 elected to National Academy of Sciences
2000 elected Fellow of the American Association for the Advancement of the Sciences
2002 elected Goldwin Smith Professor of Astronomy, Cornell University
2007 Cecilia Payne-Gaposchkin lecturer, Harvard Smithsonian Center for Astrophysics
2008 Lyman Spitzer Jr. Lecturer, Princeton University

Selected Professional Activities:**Professional Society Membership:**

American Association for the Advancement of Science
American Astronomical Society
International Astronomical Union
International Union of Radio Science

Cornell University Service

member, University Courses Advisory Group, 2011–
member, Strategic Planning Advisory Council, 2009–10
chair, Provost Search Committee, 2008
liaison, College of Arts and Sciences, ADVANCE program 2007–8
member, Faculty Advisory Committee on Tenured Appointments, 2005–7
member, Faculty Oversight Committee, Center for Advance Computing, 2007–8
member, Frank H.T. Rhodes Class of '56 Professor Selection Committee 2009–
faculty fellow, Carl Becker House, 2007–

Professional Society Service

vice president, International Astronomical Union, 2006–
ex-officio member, U.S. National Committee for IAU 2009–

member, National Academy of Sciences, Section 12 Nominating Committee, 2002–5
co-chair, 2003–5
member, Class I Membership Committee, 2003–4
chair, Henry Draper Medal Selection Committee, 2004
chair, James Craig Watson Medal Selection Committee, 2006
member, Arctowski Medal Selection Committee, 2009

member, Warner/Pierce Prize Committee, American Astronomical Society, 2008–
chair, 2009

National Advisory Committees

member, Board on Physics and Astronomy, National Research Council, 1991–3, 2008–
member, Division Committee, Engineering and Physical Sciences, National Research
Council, 2003–7,
vice-chair, 2010 Astronomy and Astrophysics Decadal Survey, National Research
Council, 2008–10,
member, Report Review Committee, National Research Council , 2007–
vice-chair, NASA Astrophysics Performance Assessment Committee, 2006–7
member, Commission on Mathematics, Physical Sciences and Applications, 1998–2000
chair, Panel on Radio and Submillimeter Astronomy, Astronomy and Astrophysics
Survey Committee, National Research Council, 1998–2000

member, Spectrum Planning and Policy Advisory Committee, National Telecommunications
and Information Administration 1994–2000
US representative, OECD Global Science Forum on “Large Projects in Astronomy”, 2004

Selected Professional Activities (continued):

Institutional Boards and Visiting Committees

- member, Board of Trustees, Associated Universities, Inc. 1994–,
member, Executive Committee 1996–2004, chairman of the Board 2000–2004
chair, Strategic Planning Committee, 2004–
member, ALMA Oversight Committee, 2005–
member, ALMA Director Search Committee, 2008
chair, Radio, Millimeter and Submillimeter Planning Group, chair 2004–6
member, Future of Radio Astronomy committee, 2007–8
- member, Visiting Committee, Department of Astronomy, University of Maryland 2009
member, Visiting Committee, Harvard–Smithsonian Center for Astrophysics, 2004–8
 chair 2007–8
member, Visiting Committee, Division of Mathematics, Physics and Astronomy, California
 Institute of Technology 2006
- member, Advisory Committee, Center of Excellence for All-Sky Astrophysics, University
 of Sydney (Australia) 2011–
trustee-at-large, Northeast Radio Observatory Corporation, 2006–
advisor to the Board, Combined Array for Research in Millimeter Astronomy, 2003–11
member, Advisory Committee, National Virtual Observatory, 2004–6
member of the Board, International Gemini Observatory, 1999–2002

Graduate Student Theses (as principal adviser)

- 1990 Wolfram Freudling, Ph.D., Cornell University
1990 Christopher Magri, Ph.D., Cornell University
1994 Tracey L. Evans, M.S., Cornell University
1995 Nicole P. Vogt, Ph.D., Cornell University
1996 Liese Van Zee, Ph.D., Cornell University
1997 Katherine P. Jore, Ph.D., Cornell University
2000 Elizabeth A. Barrett, M.Engr, Cornell University
2000 Katrin S. Hagemann, M.S., Cornell University
2001 David A. Kornreich, Ph.D., Cornell University
2005 Barbara Catinella, Ph.D., Cornell University
2005 Karen L. Masters, Ph.D., Cornell University
2006 Christopher M. Springob, Ph.D., Cornell University
2009 Sabrina Stierwalt, Ph.D., Cornell University
2011 Ann M. Martin, Ph.D., Cornell University
(2013) Elizabeth A. K. Adams, Ph.D., Cornell University (anticipated)
(2013) Shan Huang, Ph.D., Cornell University (anticipated)

Active Research Support Grants

National Science Foundation AST/EXG
“Harvesting ALFALFA: Tracking the Gas-Rich Halos at $z = 0$ ”

National Science Foundation AST/EXG
“ALFALFA: The Arecibo Extragalactic HI Legacy Survey”
(with R. Giovanelli, co-P.I.)

National Aeronautics and Space Administration, GALEX GI6
“Gas Rich, Underluminous Massive Galaxies Identified by the ALFALFA Survey”

National Aeronautics and Space Administration, GALEX GI6
“The GALEX UV Virgo Cluster Survey (GUViCS)”
U.S.-P.I. (A. Boselli, France, P.I.)

Brinson Foundation
“A Hunt for Starless Galaxies”

National Science Foundation AST/SPA
“The Undergraduate ALFALFA Team”
(R. Koopmann, S. Higdon and T. Balonek, P.I.s)

Invited Talks 1 June 2011 - 30 May 2012

Wide-Field HI Galaxy Surveys: ALFALFA and its Predictions for the Future
Conference on “Very Wide Field Surveys in the Light of Astro2010”,
Space Telescope Science Institute, June 13, 2011

The Decadal Science Strategy Survey Process
National Academies’ Committee on National Research Frameworks: Application to,
Transportation, Workshop on Research Frameworks, Washington, DC, July 19, 2011

Perché il Sole non si spegne mai? (Why doesn’t the Sun ever stop shining?)
Scurano Cultural Fest, Neviano degli Arduini, Parma, Italy, August 5, 2011

PUBLICATIONS

“An Interferometer Survey of Normal Galaxies” Haynes, M. and Sramek, R. 1975, *Astron. J.* 80, 673.

“Detection at z=0.5 of a 21-cm Absorption Line in AO 0235+164: The First Coincidence of Large Radio and Optical Redshifts” Roberts, M.S., Brown, R.L., Brundage, W.D., Rots, A.H., Haynes, M.P. and Wolfe, A.M. 1976, *Astron. J.* 81, 293.

“On the Structure of High Positive Velocity Clouds” Giovanelli, R. and Haynes, M.P. 1976, *MNRAS* 177, 525.

“Fine Structure in High Velocity HI Gas” Giovanelli, R. and Haynes, M.P. 1977, *AA* 54, 909.

“A Comparison of Neutral Hydrogen 21 cm Observations with UV and Optical Absorption Line Measurements” Giovanelli, R., Haynes, M.P., York, D.G. and Shull J.M. 1978, *Ap. J.* 219, 60.

“A Search for Atomic Hydrogen in Clusters of Galaxies” Haynes, M.P., Brown, R.L. and Roberts, M.S. 1978, *Ap. J.* 221, 414.

“Extended Neutral Hydrogen in the M51 System” Haynes, M.P., Giovanelli, R. and Burkhead, M.S. 1978, *Astron. J.* 83, 938.

“Intergalactic HI and Tidal Debris within Groups of Galaxies” Haynes, M.P. 1979, in *The Large Scale Characteristics of the Galaxy*, ed. by W.B. Burton, (Reidel, Boston), p. 567.

“Are There Really Intergalactic Hydrogen Clouds in the Sculptor Group?” Haynes, M.P. and Roberts, M.S. 1979, *Ap. J.* 227, 767.

“A Detailed Examination of the Neutral Hydrogen Distribution in the Leo Triplet NGC 3623, 3627 and 3628” Haynes, M.P., Giovanelli, R. and Roberts, M.S. 1979, *Ap. J.* 229, 83.

“Neutral Hydrogen in Supernova Remnants: IC 443 and the Cygnus Loop” Giovanelli, R. and Haynes, M.P. 1979, *Ap. J.* 230, 404.

“Velocity Structure in the Magellanic Stream” Haynes, M.P. 1979, *Astron. J.* 84, 1173.

“Intergalactic HI: Tidal Debris and Discrete Clouds” Haynes, M.P. 1979, in *Photometry, Dynamics, and Kinematics of Galaxies*, ed. by D.S. Evans, (Univ. of Texas, Austin), p. 219.

“The Zwicky Cluster Zw 1400+0949 (alias the NGC 5416 Group)” Chincarini, G.L., Giovanelli, R. and Haynes, M.P. 1979, *Astron. J.* 84, 1500.

“Neutral Hydrogen in the Interacting Pair NGC 4725/4747” Haynes, M.P. 1979, *Astron. J.* 84, 1830.

“Bright Galaxies in Nearby Abell Clusters” Haynes, M.P. 1980, *Ap. J. Suppl.* 42, 83.

“Neutral Hydrogen in Isolated Galaxies: First Results for Five Early-type Systems” Haynes, M.P.

and Giovanelli, R. 1980, *Ap. J. Lett.* 240, L87.

“Neutral Hydrogen Emission/Absorption in the Irr II Galaxy NGC 5363” Haynes, M.P. and Giovanelli, R. 1981, *Ap. J. Lett.* 246, L105.

“The HI Content of Galaxies in the Hercules Supercluster: Evidence for Sweeping” Giovanelli, R., Chincarini, G.L. and Haynes, M.P. 1981, *Ap. J.* 247, 383.

“Redshifts of Galaxies in the Galactic Anticenter: A Nearby Group in Orion?” Giovanelli, R. and Haynes, M.P. 1981, *Astron. J.* 86, 340.

“A Search for Neutral Hydrogen in D and cD Galaxies” Burns, J.O., White, R.A. and Haynes, M.P. 1981, *Astron. J.* 86, 1120.

“Neutral Hydrogen Streams in Groups of Galaxies: I. Observations” Haynes, M.P. 1981, *Astron. J.* 86, 1126.

“The Lynx-Ursa Major Supercluster” Giovanelli, R. and Haynes, M.P. 1982, *Astron. J.* 87, 1355.

“The Integral Properties of Isolated Galaxies” Haynes, M.P. 1982, in *The Comparative HI Content of Normal Galaxies*, ed. by M.P. Haynes and R. Giovanelli, (N.R.A.O.: Green Bank), p. 9.

“The Neutral Hydrogen Deficiency of the Cluster A262” Giovanelli, R., Haynes, M.P. and Chincarini, G.L. 1982, *Ap. J.* 262, 442.

“Neutral Hydrogen in Isolated Galaxies: II. The Large Angular Diameter Galaxies” Hewitt, J.N., Haynes, M.P. and Giovanelli, R. 1983, *Astron. J.* 88, 272.

“Neutral Hydrogen in X-ray Cluster Galaxies: A1367” Chincarini, G.L., Giovanelli, R., Haynes, M.P. and Fontanelli, P. 1983, *ApJ* 267, 511.

“21 cm Observations of Supercluster Galaxies: The Bridge between Coma and A1367” Chincarini, G.L., Giovanelli, R. and Haynes, M.P. 1983, *Ap. J.* 269, 13.

“The Geometry of Two Superclusters: Coma/A1367 and Pisces-Perseus” Chincarini, G.L., Giovanelli, R. and Haynes, M.P. 1983, *Astron. Astrophys.* 121, 5.

“The HI Extent and Deficiency of Spiral Galaxies in the Virgo Cluster” Giovanelli, R. and Haynes, M.P. 1983, *Astron. J.* 88, 881.

“Neutral Hydrogen in Isolated Galaxies: III. The Redshift Distribution” Haynes, M.P. and Giovanelli, R. 1983, *Ap. J.* 275, 472.

“The Use of Zwicky Magnitudes in the Computation of Luminosity for Faint Galaxies” Giovanelli, R. and Haynes, M.P. 1984, *Astron. J.* 89, 1.

“A Continuum Survey of Dwarf Galaxies” Altschuler, D.R. , Giovanardi, C.E., Giovanelli, R. and Haynes, M.P. 1984, *Astron. J.* 89, 224.

“Neutral Hydrogen in Isolated Galaxies: IV. Results for the Arecibo Survey” Haynes, M.P. and Giovanelli, R. 1984, *Astron. J.* 89, 758.

“Radio Continuum Emission in Isolated and Cluster Spirals” Altschuler, D.R., Giovanelli, R. and Haynes, M.P. 1984, *Astron. J.* 89, 1695.

“The Influence of Environment on the HI Content of Galaxies” Haynes, M.P., Giovanelli, R. and Chincarini, G.L., 1984, *Annu. Rev. Astron. Astrophys.* 22, 445.

“HI Deficiency in the Virgo Cluster” Haynes, M.P. 1985, in *The Virgo Cluster*, O.-G. Richter and B. Binggeli, eds., (European Southern Observatory: Munich), p. 45.

“Gas Deficiency in Cluster Spirals: A Comparison of Nine Clusters” Giovanelli, R. and Haynes, M.P. 1985, *Ap. J.* 292, 404.

“A 21 cm Survey of the Pisces-Perseus Supercluster: I. The Declination Zone +27.5 to +33.5 Degrees” Giovanelli, R. and Haynes, M.P. 1985, *Astron. J.* 90, 2445.

“Morphological Segregation in the Pisces-Perseus Supercluster” Giovanelli, R., Haynes, M.P., and Chincarini, G.L. 1986, *Ap. J.* 300, 77.

“UGC 12591: The Most Rapidly Rotating Disk Galaxy” Giovanelli, R., Haynes, M.P., Rubin, V.C. and Ford, W.K. 1986, *Ap. J. Lett.* 301, L7.

“The Pattern of HI Deficiency in the Virgo Cluster” Haynes, M.P. and Giovanelli, R. 1986, *Ap. J.* 306, 466.

“The Connection Between Pisces-Perseus and the Local Supercluster” Haynes, M.P. and Giovanelli, R. 1986, *Ap. J. Lett.* 306, L55.

“A 21 cm Survey of the Pisces-Perseus Supercluster: II. The Declination Zone +21.5 to +27.5 Degrees” Giovanelli, R., Haynes, M.P., Myers, S.R. and Roth, J. 1986, *Astron. J.* 92, 250.

“Distances and Motions of 2000 Galaxies in the Pisces-Perseus Supercluster” Haynes, M.P. and Giovanelli, R. 1986, in *Galaxy Distances and Deviations from a Universal Expansion*, B. Madore and R.B. Tully, eds. (Reidel: Boston) p. 117.

“Results on the Large-Scale Structure in the Universe from 21 cm Redshift Surveys” Giovanelli, R. and Haynes, M.P. 1986, *Reports of the XIX I.A.U. General Assembly*, (Reidel: Boston).

“The Large-Scale Distribution of Galaxy Types” Haynes, M.P. 1987, in *Nearly Normal Galaxies: The Planck Time to the Present Time*, S.M. Faber, ed. (Springer-Verlag: New York) p. 220.

“A 21 cm Survey of the Pisces-Perseus Supercluster: III. The Region North of Declination +38 Degrees” Haynes, M.P., Giovanelli, R., Starosta, B. and Magri, C.A. 1986, *Astron. J.* 95, 607

“Large-Scale Structure in the Pisces-Perseus Supercluster” Haynes, M.P. 1987, in *Texas Symposium on Relativistic Astrophysics*, (World Scientific Publishing: Singapore)p. 278.

“Extragalactic Neutral Hydrogen” Giovanelli, R. and Haynes, M.P. 1988 in *Galactic and Extragalactic Radio Astronomy*, G.L. Verschuur and K.I. Kellermann, eds., (Springer-Verlag: New York), p. 522.

“Interacting Galaxies and Cluster Environments” Haynes, M.P. 1987, in *Proceedings of a Workshop on the Scientific Prospects of the Arecibo Upgrade*, J. Taylor and T. Hagfors eds., (NAIC: Ithaca) p. 45.

“Large-Scale Variations in the Luminosity Function of Galaxies” Giovanelli, R. and Haynes, M.P. 1988, in *Towards Understanding Galaxies at High Redshift*, ed. by R.G. Kron and A. Renzini (Kluwer: Hingham), p. 133.

“Star Formation in Single and Binary Galaxies” Haynes, M.P. and Herter, T.L. 1988, *Astron. J.* 96, 504.

“The Pattern of Gas Deficiency in Galaxies: A Study in HI and X-rays” Magri, C., Haynes, M.P., Forman, W., Jones, C. and Giovanelli, R. 1988, *Ap. J.* 333, 136.

“HI Observations of Galaxies in the Hercules Supercluster” Freudling, W., Haynes, M.P. and Giovanelli, R. 1988, *Astron. J.* 96, 1791.

“Morphology and Environment” Haynes, M.P. 1989, in *The Minnesota Lectures on Clusters of Galaxies and Large-Scale Structure*, ed. by J.M. Dickey, A.S.P. Conf. Ser. 5, 71.

“A 21 cm Survey of the Pisces-Perseus Supercluster: IV. Addenda to the Declination Zone +21.5° to +33.5°” Giovanelli, R. and Haynes, M.P. 1989, *Astron. J.* 97, 633.

“Large-Scale Structure in the Local Universe: The Pisces-Perseus Supercluster” Haynes, M.P. and Giovanelli, R. 1988, in *Large-Scale Motions in the Universe*, ed. by V.C. Rubin and G.F. Coyne (Princeton University Press: Princeton) p. 45.

“Void Statistics, Scaling and the Origins of Large-Scale Structure,” Fry, J.N., Giovanelli, R., Haynes, M.P. and Melott, A.L. 1989, *Ap. J.* 340, 11.

“Topology of Large Scale Structure in the Universe: Observations” Gott, J.R., Miller, J., Thuan, T.X., Schneider, S.E., Weinberg, D., Gammie, C., Polk, K., Vogeley, M., Jeffrey, S., Bhavsar, S.P., Melott, A.L., Giovanelli, R., Haynes, M.P., Tully, R.B. and Hamilton, A.S. 1989, *Ap. J.* 340, 625.

“Double Galaxy Redshifts and the Statistics of Small Numbers” Newman, W.I., Haynes, M.P. and Terzian, Y. 1989, *Ap. J.* 344, 111.

“A Protogalaxy in the Local Supercluster” Giovanelli, R. and Haynes, M.P. 1989, *Ap. J. Lett.* 345, L5.

“Evidence for Gas Deficiency in Cluster Galaxies” Haynes, M.P. 1990, in *Clusters of Galaxies*, ed. by W.R. Oegerle, M.J. Fitchett and L. Danly, (Cambridge University Press: New York), p. 177.

“The Influence of Environment on Gas and Dust in S0 Galaxies” Haynes, M.P., Herter, T.L., Barton, A.S., and Benensohn, J.S. 1990, *Astron. J.* 99, 1740.

“An Optical Counterpart of the Giant HI Cloud - HI 1225+0146” McMahon, R.G., Irwin, M.J., Giovanelli, R., Haynes, M.P., Wolfe, A.M. and Hazard, C. 1990, *Ap. J.* 359, 302.

“A Complete Arecibo Map of HI 1225+01” Giovanelli, R., Williams, J.P. and Haynes, M.P. 1991, *Astron. J.* 101, 1242.

“The Optical Counterpart to the Large HI Cloud in Virgo” Salzer, J.J., di Serego Alighieri, S., Matteucci, F., Giovanelli, R. and Haynes, M.P. 1991, *Astron. J.* 101, 1258.

“The Neutral Hydrogen Content of Early-Type Disk Galaxies” Eder, J., Giovanelli, R. and Haynes, M.P. 1991, *Astron. J.* 102, 532 .

“The Distribution of Galaxies around NGC 5846” Haynes, M.P. and Giovanelli, R. 1991, *Astron. J.* 102, 841.

“Redshift Surveys of Galaxies” Giovanelli, R. and Haynes M.P., 1991, *Annu. Rev. Astron. Astrophys.* 29, 499.

“ The Peculiar Velocity Field in the Hercules Region” Freudling, W., Martel, H. and Haynes, M.P. 1991, *Ap. J.* 377, 365.

“Neutral Hydrogen Observations of Galaxies in Superclusters” Haynes, M.P. and Giovanelli, R. 1991, *Ap. J. Suppl.* 77, 331.

“Scale Invariance in the Galaxy Distribution” Guzzo, G., Iovino, A., Chincarini, G.L., Giovanelli, R. and Haynes, M.P. 1991, *Ap. J. Lett.* 382, L5.

“Dependence of Galaxy Properties on Viewing Angle” Burstein, D., Haynes, M.P. and Faber, S.M. 1991, *Nature* **353**, 515.

“HI Observations of Galaxies in the Hercules Supercluster. II. Additional UGC Galaxies and Galaxies in Selected CGCG Fields” Freudling, W.F., Haynes, M.P. and Giovanelli, R. 1992, *Ap. J. Suppl.* 79, 157.

“Surveys of Galaxy Redshifts” Haynes, M.P. 1992, in *Statistical Challenges in Modern Astronomy*, ed. by G.J. Basu and E.F. Feigelson, (Springer-Verlag: New York) p.3.

“Limitations to the Method of Power Spectrum Analysis: Nonstationary, Biased Estimators and Weak Convergence to Normality” Newman, W.I., Haynes, M.P. and Terzian, Y.T. 1992, in *Statistical Challenges in Modern Astronomy*, ed. by G.J. Basu and E.F. Feigelson, (Springer-Verlag: New York) p. 137.

“A Survey of the Pisces-Perseus Supercluster. V. The Declination Strip $+33.5^\circ$ to $+39.5^\circ$ and the Main Supercluster Ridge” Wegner, G., Haynes, M.P. and Giovanelli, R. 1993, *Astron. J.* 105, 1251.

“A Survey of the Pisces-Perseus Supercluster. VI. The Declination Strip $+15.5^\circ$ to $+21.5^\circ$ ” Giovanelli, R. and Haynes, M.P. 1993, *Astron. J.* 105, 1271.

“Observations of Southern Dwarf Galaxies” Maia, M.A.G., da Costa, L.N., Giovanelli, R., and

Haynes, M.P. 1993, *Astron. J.* 105, 2107.

“The Rotation Curves of Galaxies at Intermediate Redshift” Vogt, N.P., Herter, T., Haynes, M.P. and Courteau, S. 1993, *Ap. J. Lett.* 415, L95.

“The Near-Infrared Tully–Fisher Relation: A Preliminary Study of the Coma and Abell 400 Clusters” Guhathakurta, P., Bernstein, G., Raychaudhury, S., Haynes, M., Giovanelli, R., Herter, T. and Vogt, N. 1993, *Pub. Astro. Soc. Pac.* 105, 1022.

“Correlation Functions in the Pisces–Perseus Redshift Survey” Bonometto S., Iovino, A., Guzzo, L. Giovanelli, R. and Haynes, M. 1993, *Ap. J.* 419, 451.

“Galaxy Clustering, Morphology and Luminosity” Iovino, A., Giovanelli, R., Haynes, M., Chincarini, G. and Guzzo, G. 1993, *MNRAS* 265, 21.

“Redshift Data and Statistical Inference” Newman, W.I., Haynes, M.P. and Terzian, T. 1994, *Ap. J.* 431, 147.

“Extinction of Sc Galaxies at I–Band” Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G., daCosta, L. and Freudling, W. 1994. *Astron. J.* 107, 2036.

“Variation of Physical Properties along the Hubble Sequence” Roberts, M.S. and Haynes, M.P. 1994. *Ann. Rev. Astr. Ap.* **32**, 115.

“Tests of the Tully–Fisher Relation: I. Scatter in Infrared Magnitude vs. 21 cm Width” Bernstein, G.M., Guhathakurta, R., Raychaudhury, S., Giovanelli, R., Haynes, M.P., Herter, T. and Vogt, N.P. 1994. *Astron. J.* 107, 1962.

“Near-Infrared Imaging and Spectroscopy of the Starburst Galaxy UGC 8387” Smith, D.A., Herter, T., Haynes, M.P., Beichman, C.A and the PFIR Camera Team, 1995, *Ap. J.* 439, 623.

“The Spatial Distribution, Kinematics, and Dynamics of the Galaxies in the Region of Abell 2634 and 2666” Scodéglio, M., Solanes, J.M., Giovanelli, R., and Haynes, M.P. 1995, *Ap. J.* 444, 41.

“HI Envelopes Around Low Luminosity Galaxies” van Zee, L., Haynes, M.P. and Giovanelli, R. 1995, *Astron. J.* 109, 990.

“HI 2334+26: An Extended HI Cloud near Abell 2634” Giovanelli, R., Scodéglio, M., Solanes, J.M., Haynes, M.P. and Arce, H. 1995, *Astron. J.* 109, 1451.

“VLA Observations of HI 1225+01” Chengalur, J.N., Giovanelli, R. and Haynes, M.P. 1995, *Astron. J.* 109, 2415.

“The Dependence of Photometric Properties of Disk Galaxies on Luminosity: Surface Brightness, Scale Length and Internal Extinction” Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G., da Costa, L.N. and Freudling, W. 1995, *Astron. J.* 110, 1059.

“Determination of Malmquist Bias and Selection Effects from Monte Carlo Simulations” Freudling, W.F., da Costa, L.N., Wegner, G., Giovanelli, R., Haynes, M.P. and Salzer, J.J. 1995. *Astron. J.* 110,

“Cool HI Disks in Galaxies” Haynes, M.P. and Broeils, A.H. 1997, in *The Interstellar Medium in Galaxies*, ed. by J.M. van der Hulst (Kluwer: New York), 75.

“Deviations from Hierarchical Clustering in Real and Redshift Space” Ghigna, S., Bonometto, S., Guzzo, L. Giovanelli, R., Haynes, M.P., Klypin, A. and Primack, J.R. 1996, *Ap. J.* 463, 395.

“Spiral Galaxies and the Peculiar Velocity Field” R. Giovanelli, M. Haynes, P. Chamaraux, L. da Costa, W. Freudling, J. Salzer and G. Wegner 1995, in “Examining the Big Bang and Diffuse Background Radiations”, M. Kafatos, ed. (to appear).

“Starburst Galaxies II: Imaging and Spectroscopy of a Radio-Selected Sample” Smith, D.A., Herter, T., Haynes M.P., Beichman, C.A., and Gautier, T.N. III, 1996 *Ap. J. Suppl.* 104, 217.

“The HI Content of Spirals. I. Field Galaxy HI Mass Functions and HI Mass–Optical Size Regressions” Solanes, J.-M., Giovanelli, R. and Haynes, M.P. 1996, *Ap. J.* 461, 609.

“A Test of the Lauer–Postman Bulk Flow” Giovanelli, R., Haynes, M.P., Wegner, G., da Costa, L.N., Freudling, W. and Salzer, J.J. 1996, *Ap. J. Lett.* 464, L99.

“HI Redshift Surveys and Large Scale Structure” Salzer, J.J. and Haynes, M.P. 1996, in “Minnesota Lectures on Extragalactic Neutral Hydrogen”, ed. Evan D. Skillman, Astr. Soc. Pacific Conf. Ser. **106**, 357.

“Future Prospects with the Arecibo and Green Bank Telescopes” Vanden Bout, P.A. and Haynes, M.P. 1996, in “Minnesota Lectures on Extragalactic Neutral Hydrogen”, ed. Evan D. Skillman, Astr. Soc. Pacific Conf. Ser. **106**, 389.

“Practical Aspects of Redshift Surveys” Haynes, M.P. 1996, in “Dark Matter in the Universe” S. Bonometto, J. Primack and A. Provenzale eds, (IOS Press: Washington), 71.

“Evolutionary Studies of the Low Metallicity Dwarf Irregular Galaxy UGCA 20” VanZee, L., Haynes, M.P., Salzer, J.J. and Broeils, A.H. 1996, *Astron. J.* 112, 129.

“The Mass Distribution in the Nearby Universe” da Costa, L.N., Freudling, W., Wegner, G., Giovanelli, R., Haynes, M.P., and Salzer, J.J. 1996, *Ap. J. Lett.* 469, L5.

“A Counter-rotating Disk in the Normal Sa Galaxy NGC 4138” Jore, K.P., Broeils, A.H. and Haynes, M.P. 1996, *Astron. J.* 112, 438.

“Two-Stream Instability in Counterrotating Galaxies” Lovelace, R.V.E., Jore, K.P. and Haynes, M.P. 1997, *Ap. J.* 475, 83.

“The I–Band Tully–Fisher Relation for Cluster Galaxies: Data Presentation” Giovanelli, R., Haynes, M.P., Herter, T., Vogt, N., da Costa, L.N., Freudling, W., Salzer, J.J. and Wegner, G. 1997, *Astron. J.* 113, 22.

“The I–Band Tully–Fisher Relation for Cluster Galaxies: the Template Relation and Cluster Mo-

tions” Giovanelli, R., Haynes, M.P., Herter, T., Vogt, N., da Costa, L.N., Freudling, W., Salzer, J.J. and Wegner, G. 1997, *Astron. J.* 113, 53.

“The Relative Distances to the Clusters A2634 and Coma” Scodeggio, M., Giovanelli, R. and Haynes, M.P. 1997, *Astron. J.* 113, 101.

“The Tully–Fisher Relation and H_0 ” Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G., da Costa, L.N. and Freudling, W. 1997 *Ap. J. Lett.* 477, 1.

“21 cm HI Line Spectra of Galaxies in Nearby Clusters” Haynes, M.P., Giovanelli, R., Herter, T., Vogt, N., Freudling, W., Maia, M.A.G., Salzer, J.J. and Wegner, G. 1997, *Astron. J.* 113, 1197.

“Obtaining High Precision HI Fluxes for Galaxies” van Zee, L., Maddalena, R.J., Haynes, M.P., Hogg, D.E. and Roberts, M.S. 1997, *Astron. J.* 113, 1638.

“A Comparative Study of Star Formation Thresholds in Gas-Rich Low Surface Brightness Dwarf Galaxies” van Zee, L., Haynes, M.P., Salzer, J.J. and Broeils, A.H. 1997, *Astron. J.* 113, 1618.

“Peculiar Velocities of Clusters in Cold Dark Matter Models” Borgani, S., da Costa, L.N., Freudling, W., Giovanelli, R., Haynes, M.P., Salzer, J.J., and Wegner, G. 1997, *Ap. J. Lett.* 482, L121.

“Seeking the Local Convergence Depth. I. Tully–Fisher Observations of the Clusters A168, A397, A569, A1139, A1228 and A1983” Dale, D.A., Giovanelli, R., Haynes, M.P., Scodeggio, M. Hardy, E. and Campusano, L. 1997, *Astron. J.* 114, 455.

“An Economical Technique for the Estimate of Galaxy Distances: the Photometric Fundamental Plane” Scodeggio, M., Giovanelli, R. and Haynes, M.P. 1997, *Astron. J.* 113, 2087..

“Starburst Galaxies III: Properties of a Radio Selected Sample” Smith, D.A., Herter, T., and Haynes M.P. 1998, *Ap. J.* 494, 150.

“Redshift-Space Distortions and the Real-Space Clustering of Different Galaxy Types” Guzzo, L., Strauss, M.A., Fisher, K.B., Giovanelli, R. and Haynes, M.P. 1997, *Ap. J.* 489, 37.

“Asymmetry in High Precision Global HI Profiles of Isolated Spiral Galaxies” Haynes, M.P., Hogg, D.E., Maddalena, R.J., Roberts, M.S. and van Zee L. 1998, *Astron. J.* 115, 62.

“Element Enrichment and Stellar Populations of Gas Rich Low Surface Brightness Dwarf Galaxies” van Zee, L., Haynes, M.P. and Salzer, J.J. 1997, *Astron. J.* 114, 2497.

“Optical Colors and Metallicities of Gas Rich Quiescent Dwarf Galaxies” van Zee, L., Haynes, M.P. and Salzer, J.J. 1997, *Astron. J.* 114, 2479.

“Seeking the Local Convergence Depth: II. Tully-Fisher Observations of the Clusters A114, A119, A194, A2295, A2457, A2806, A3193, A3381 and A3744” Dale, D.A., Giovanelli, R., Haynes, M.P., Scodeggio, M. Hardy, E. and Campusano, L. 1998, *Astron. J.* 115, 418.

“Peculiar Velocities of Clusters in Cold Dark Matter Models” Borgani, S., da Costa, L., Freudling, W., Giovanelli, R., Haynes, M.P., Salzer, J. and Wegner, G. 1997, *Ap. J. Lett.* 482, 121.

“The Complex Kinematics of the Neutral Hydrogen Associated with IZw18” van Zee, L., Westpfahl, D., Haynes, M.P. and Salzer, J.J. 1998, *Astron. J.* 115, 1000.

“Abundances in Spiral Galaxies: Evidence for Primary Nitrogen Production” van Zee, L., Salzer, J.J. and Haynes, M.P. 1998, *Ap. J. Lett.* 497, L1.

“Comparison of the SFI Peculiar Velocities with the IRAS 1.2–Jy Gravity Field” da Costa, L.N., Nusser, A., Freudling, W., Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G. 1998, *MNRAS*, 299, 425.

“Near-infrared Observations of Galaxies in Pisces–Perseus. II. Extinction Effects and Disk Opacity” Moriondo, G., Giovanelli, R. and Haynes, M.P. 1998, *Astron. Astrophys.* 338, 795.

“Peculiar Velocity Dipoles of Field Galaxies” Giovanelli, R., Haynes, M.P., Freudling, W., da Costa, L.N., Salzer, J.J. and Wegner, G. 1998, *Ap. J. Lett.* 505, L91.

“Spectroscopy of Outlying HII Regions in Spiral Galaxies” van Zee, L., Salzer, J.J., Haynes, M.P., O’Donoghue, A.A., and Balonek, T.J. 1998, *Astron. J.* 116, 2805.

“A Photometric Method for Quantifying Asymmetry in Disk Galaxies” Kornreich, D.A., Haynes, M.P., Lovelace, R.V.E. 1998, *Astron. J.* 116, 2154.

“The Motions of Clusters of Galaxies and the Dipoles of the Peculiar Velocity Field” Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G., da Costa, L.N. and Freudling, W. 1998, *Astron. J.* 116, 2632.

“The Universality of the Fundamental Plane of E and S0 Galaxies: Sample Definition and I-Band Photometric Data” Scodeggio, M., Giovanelli, R. and Haynes, M.P. 1998, *Astron. J.* 116, 2728.

“The Universality of the Fundamental Plane of E and S0 Galaxies: Spectroscopic Data” Scodeggio, M., Giovanelli, R. and Haynes, M.P. 1998, *Astron. J.* 116, 2738.

“Seeking the Local Convergence Depth: The Abell Cluster Dipole Flow to $200h^{-1}$ Mpc” Dale, D.A., Giovanelli, R., Haynes, M.P., Scodeggio, M. Campusano, L.E., Hardy, E. and Borgani, S. 1999, *Ap. J. Lett.* 510, L11.

“The Luminous Starburst Ring in NGC 7771” Smith, D.A., Herter, T., Haynes M.P. and Neff, S.G. 1999, *Ap. J.* 510, 669.

“The I-band Tully-Fisher Relation for Sc Galaxies: Optical Imaging Data” Haynes, M.P., Giovanelli, R., Salzer, J.J., Wegner, G., Freudling, W., da Costa, L.N. Herter, T. and Vogt, N.P. 1999, *Astron. J.* 117, 1668.

“The I-band Tully-Fisher Relation for Sc Galaxies: 21 cm HI Line Data” Haynes, M.P., Giovanelli, R., Chamaraux, P., Freudling, W., da Costa, L.N., Salzer, J.J., and Wegner, G., 1999, *Astron. J.* 117, 2039.

“No Hubble Bubble in the Local Universe” Giovanelli, R., Dale, D., Haynes, M.P., Hardy, E. and Campusano, L. 1999 *Ap. J.* 525, 25.

“Eccentric Behavior of Disk Galaxies” Lovelace, R.V.E., Zhang, L., Kornreich, D.A. and Haynes, M.P. 1999 *Ap. J.* 524, 634.

“Large-Scale Power Spectrum and Cosmological Parameters from SFI Peculiar Velocities” Freudling, W., Zehavi, I., da Costa, L.N., Dekel, A., Eldar, A., Giovanelli, R., Haynes, M.P., Salzer, J.J., Wegner, G and Zaroubi, S. 1999, *Ap. J.* 523, 1.

“Seeking the Local Convergence Depth: V. Tully-Fisher Peculiar Velocities for 52 Abell Clusters” Dale, D.A., Giovanelli, R., Haynes, M.P., Campusano, L.E. and Hardy, E. 1999, *Astron. J.* 118, 1489.

“Seeking the Local Convergence Depth: IV. Tully-Fisher Observations of 35 Abell Clusters” Dale, D.A., Giovanelli, R., Haynes, M.P., Hardy, E. and Campusano, L.E. 1999, *Astron. J.* 118, 1468.

“Near-Infrared Observations of Galaxies in Pisces-Perseus. III. Global Scaling Relations of Disks and Bulges” Moriondo, G., Giovanelli, R. and Haynes, M.P. 1999 *Astron. Ap.* 346, 415.

“Correlation Analysis of SFI Peculiar Velocities” Borgani, S., da Costa, L.N., Zehavi, I., Giovanelli, R., Haynes, M., Freudling, W., Wegner, G. and Salzer, J.J., 2000. *Astron. J.* 119, 102.

“Departures From Axisymmetric Morphology and Dynamics in Spiral Galaxies” Kornreich, D.A., Haynes, M.P., Lovelace, R.V.E. and van Zee, L. 2000, *Astron. J.* 120, 139.

“Kinematic Evidence of Minor Mergers in Normal Sa Galaxies: NGC 3626, NGC 3900, NGC 4772 and NGC 5854” Haynes, M.P., Jore, K.P., Barrett, E.A., Broeils, A.H. and Murray, B.M. 2000, *Astron. J.* 120, 703.

“The HI Content of Spirals. II. Gas Deficiency in Cluster Galaxies” Solanes, J.M., Manrique, A., Garcia-Gomez, C., Gonzales-Casado, Giovanelli, R., and Haynes, M.P. 2001, *Ap. J.* 548, 97.

“Kinematic Evidence of Minor Mergers in Normal Sa Galaxies” Haynes, M.P. 2001, in “Gas and Galaxy Evolution”, ed. J.E. Hibbard, M.P. Rupen and J.H. van Gorkom, Astr. Soc. Pacific Conf. Ser. 40, p. 257.

“Gravitational Lensing by Nearby Clusters of Galaxies” Cypriano, E.S., Sodre Jr., L., Campusano, L.E., Kneib, J.-P., Giovanelli, R., Haynes, M.P., Dale, D.A. and Hardy, E. 2001, *Astron. J.* 121, 10.

“Hot and Cold Gas in Early-Type Spirals: NGC 3623, NGC 2775 and NGC 1291” Hogg, D.E., Roberts, M.S., Bregman, J.N. and Haynes, M.P. 2001, *Astron. J.* 121, 1336.

“Asymmetry in Isolated, Morphologically Normal Sa Galaxies” Kornreich, D.A., Haynes, M.P., Jore, K.P. and Lovelace, R.V.E. 2001, *Astron. J.* 121, 1358.

“Signatures of Galaxy-Cluster Interactions: Spiral Galaxy Rotation Curve Asymmetry, Shape, and Extent” Dale, D.A., Giovanelli, R., Haynes, M.P., Hardy, E. and Campusano, L. 2001, *Astron. J.* 121, 1886.

“Comparing the SFI Peculiar Velocities with the PSCz Gravity Field: a VELMOD Analysis” Branchini, E., Freudling, W., da Costa, L.N., Frenk, C.S., Giovanelli, R., Haynes, M.P., Salzer,

J.J., Wegner, G. and Zehavi, I. 2001, MNRAS, 326, 1191.

“Report of the Panel on Radio and Sub-millimeter Wave Astronomy” Haynes, M.P., Moran, J.M., Jr., Blake, G.A., Campbell, D.B., Carlstrom, J.E., Evans, N.J., Hewitt, J.N., Kellermann, K.I., Marscher, A.P., Myers, S.T., Reid, M.J., Welch, W.J. and Backer, D. 2001, in “Astronomy and Astrophysics in the New Millennium: Panel Reports”, (National Academy Press: Washington), p. 167.

“The Inner Scale Length of Spiral Galaxy Rotation Curves” Giovanelli, R. and Haynes, M.P. 2002, Ap.J. (Lett.) 571, L107.

“The 3D Structure of the Virgo Cluster Region from Tully–Fisher and HI Data” Solanes, J.M., Sanchis, T., Salvador–Solé, E., Giovanelli, R. and Haynes M.P. 2002, Astron. J. 124, 2440.

“‘Sloshing’ Librations and Asymmetry in Disk Galaxies” Kornreich, D.A., Lovelace, R.V.E., and Haynes, M.P. 2002, Astrophys. J. 580, 705.

“Internal Extinction in Galaxies in the Near Infrared” Masters, K.L., Giovanelli, R., and Haynes, M.P. 2003, Astron. J. 126, 158.

“An Estimate of Ω_m without Priors” Feldman, H.A., Juszkiewicz, R., Ferreia, P., Davis, M., Gaztanaga, E., Fry, J.N., Jaffe, A., Chambers, S.W., da Costa, L.N., Bernardi, M., Giovanelli, R., Haynes, M.P. and Wegner, G. 2003, Astrophys. J. 596, L131.

“The Impact of Distance Uncertainties on Local Luminosity and Mass Functions” Masters, K.L., Haynes, M.P. and Giovanelli, R. 2004, Astrophys. J. (Lett.) 607, L115.

“M/L, $H\alpha$ Rotation Curves and HI Measurements for 329 Nearby Cluster and Field Spirals: I. Data” Vogt, N.P., Haynes, M.P., Herter, T. and Giovanelli, R. 2004, Astron. J. 127, 3273.

“M/L, $H\alpha$ Rotation Curves and HI Measurements for 329 Nearby Cluster and Field Spirals: II. Evidence for Galaxy Infall” Vogt, N.P., Haynes, M.P., Giovanelli, R. and Herter, T. 2004, Astron. J. 127, 3300.

“M/L, $H\alpha$ Rotation Curves and HI Measurements for 329 Nearby Cluster and Field Spirals: III. Evolution in Fundamental Galaxy Parameters” Vogt, N.P., Haynes, M.P., Giovanelli, R. and Herter, T. 2004, Astron. J. 127, 3325.

“Rotationally Supported Virgo Cluster Dwarf Elliptical Galaxies: Stripped Dwarf Irregular Galaxies?” van Zee, L., Skillman, E.D. and Haynes, M.P. 2004, Astro. J. 128, 121.

“Detection of 21 Centimeter H I Absorption at $z = 0.78$ in a Survey of Radio Continuum Sources” Darling, J., Giovanelli, R., Haynes, M.P., Bolatto, A.D. and Bower, G.C 2004, Astrophys. J. (Lett.) 613, L101.

“Morphology, Environment and the HI Mass Function” Springob, C.M., Haynes, M.P. and Giovanelli, R. 2004, Astrophys. J. 621, 215.

“Galaxy Peculiar Velocities and Infall onto Groups” Ceccarelli, M.L., Valotto, C., Lambas, D.G.,

Padilla, N., Giovanelli, R. and Haynes, M. 2005, *Astrophys. J.* 622, 853.

“The Cusp/core Problem in Galactic Halos: Long-Slit Spectra for a Large Dwarf Galaxy Sample” Spekkens, K., Giovanelli, R., and Haynes, M.P. 2005, *Astron. J.* 129, 2119.

“Rotational Widths for Use in the TF Relation. I. Long-slit Spectroscopic Data” Catinella, B., Giovanelli, R. and Haynes, M.P. 2005, *Astron. J.*, 130, 1037.

“A Digital Archive of HI 21 cm Line Spectra of Optically-targeted Galaxies” Springob, C.M., Haynes, M.P., Giovanelli, R. and Kent, B.R. 2005, *Astrophys. J. (Suppl.)*, 160, 149.

“The Arecibo Legacy Fast ALFA Survey: I. Science Goals, Survey Design and Strategy” Giovanelli, R., Haynes, M.P., Kent, B.R., Perillat, P., Saintonge, A., Brosch, N., Catinella, B., Hoffman, G.L., Stierwalt, S., Spekkens, K., Lerner, M., Masters, K.L., Momjian, E., Rosenberg, J., Springob, C.M. plus 25 others, 2005, *Astron. J.* 130, 2598.

“The Arecibo Legacy Fast ALFA Survey: II. Results of Precursor Observations” Giovanelli, R., Haynes, M.P., Kent, B.R., Perillat, P., Catinella, B., Hoffman, G.L., Momjian, E., Rosenberg, J., Saintonge, A., Spekkens, K., Brosch, N., Masters, K.L., Springob, C.M., Karachentsev, I.D., Karachentseva, V.E., Koopmann, R.A., Muller, E., van Driel, W. and van Zee, L., 2005, *Astron. J.* 130, 2613.

“A Comparison of H α and Stellar Scale Lengths in Virgo and Field Spirals” Koopmann, R.A., Haynes, M.P. and Catinella, B. 2006, *Astron. J.*, 131, 716.

“Template Rotation Curves for Disk Galaxies” Catinella, B., Giovanelli, R. and Haynes, M.P. 2005, *Astrophys J.* 640, 751,

“Oxygen and Nitrogen in Isolated Dwarf Irregular Galaxies” van Zee, L. and Haynes, M.P. 2006, *Astrophys. J.* 636, 214.

“Oxygen and Nitrogen in Leo A and GR 8” van Zee, L., Skillman, E. and Haynes, M.P. 2006, *Astrophys. J.* 637, 269.

“SFI++ I: A New I-band Tully-Fisher Template, the Cluster Peculiar Velocity Dispersion and H $_o$ ” Masters, K.L., Springob, C.M., Haynes, M.P. and Giovanelli, R. 2006, *Astrophys. J.* 653, 861.

“The Arecibo Legacy Fast ALFA Survey: III. HI Source Catalog of the Northern Virgo Cluster Region” Giovanelli, R., Haynes, M.P., Kent, B.R., Saintonge, A., Stierwalt, S., Altaf, A., Balonek, T., Brosch, N., Brown, S., Catinella, B., Furniss, A., Goldstein, J., Hoffman, G.L., Koopmann, R.A., Kornreich, D.A., Mahmood, B., Martin, A.M., Mitschang, A., Momjian, E., Nair, P.H., Rosenberg, J.L. and Walsh, B. 2007, *Astron. J.* 133, 2569.

“Rotational Widths for Use in the TF Relation. II. The Impact of Surface Brightness” Catinella, B., Haynes, M.P. and Giovanelli, R. 2007, *Astron. J.* 134, 334.

“SFI++ II: A New I-band Tully-Fisher Catalog, Derivation of Peculiar Velocities and Dataset Properties” Springob, C.M., Masters, K.L., Haynes, M.P. and Giovanelli, R. 2007, *Astrophys. J. Suppl.* 172, 599.

“Diffuse HI Disks in Isolated Galaxies” Hogg, D.E., Roberts, M.S., Haynes, M.P. and Maddalena, R.J., 2007, Astro. J. 134, 1046.

“Optically Unseen HI Detections towards the Virgo Cluster detected in the Arecibo Legacy Fast ALFA Survey” Kent, B.R., Giovanelli, R., Haynes, M.P., Saintonge, A., Stierwalt, S., Balonek, T., Brosch, N., Catinella, B., Koopmann, R.A., Momjian, E. and Spekkens, K. 2007, Astrophys. J. (Lett.) 665, L15.

“NGC 4254: An Act of Harassment Uncovered by the Arecibo Legacy Fast ALFA Survey” Haynes, M.P., Giovanelli, R. and Kent, B.R. 2007, Astrophys. J. (Lett.) 665, L19.

“The HI Content of Early-Type Galaxies from the ALFALFA survey: I. Catalogued HI sources in the Virgo Cluster” di Serego Alighieri, S., Gavazzi, G., Giovanardi, C., Giovanelli, R., Grossi, M., Haynes, M.P., Kent, B.R., Koopmann, R.A., Pellegrini, S., Scodellaggio, M. and Trinchieri, G. 2007, Astron. Astrophys. 474, 851.

“Geometrical Tests of Cosmological Models. I. Probing Dark Energy Using the Kinematics of High-redshift Galaxies” Marinoni, C., Saintonge, A., Giovanelli, R., Haynes, M.P., Masters, K.L., Le Fevre, O., Mazure, A., Taxil, P. and Virey, J.-M. 2008, Astron. Astrophys. 478, 43.

“Geometrical Tests of Cosmological Models. II. Calibration of Rotational Widths and Disc Scaling Relations” Saintonge, A., Masters, K.L., Marinoni, C., Spekkens, K., Giovanelli, R. and Haynes, M.P. 2008, Astron. Astrophys. 478, 57.

“Geometrical Tests of Cosmological Models. III. The cosmology-evolution diagram at z=1” Marinoni, C., Saintonge, A., Contini, T., Walcher, C.J., Giovanelli, R., Haynes, M.P., Masters, K.L., Ilbert, O., Iovino, A., Le Brun, V., Le Fevre, O., Mazure, A., Tresse, L., Virey, J.-M., Bardelli, S., Bottini, D., Garilli, B., Guzzo, G., Maccagni, D., Picat, J.P., Scaramelllia, R., Scodellaggio, M., Taxil, P., Vettolani, G., Zanichelli, A. and Zucca, E. 2008, Astron. Astrophys. 478, 71.

“The Arecibo Legacy Fast ALFA Survey: V. HI Source Catalog of the Anti-Virgo Region at Decl. = +27°” Saintonge, A., Giovanelli, R., Haynes, M.P., Brosch, N., Hoffman, G.L., Kent, B.R., Martin, A.M., and Stierwalt, S. 2008, Astro.J. 135, 588.

“The ALFALFA Search for (Almost) Dark Galaxies across the HI Mass Function” Haynes, M.P. 2008, in *Dark Galaxies and Lost Baryons*, I.A.U. Symposium # 244, J.I. Davies & M.J. Disney, eds. (Cambridge U. Press), 83.

“HI Cosmology in the Local Universe with ALFALFA” Haynes, M.P. 2008 in *Frontiers of Astrophysics: NRAO 50th Anniversary Symposium*, A. Bridle, J. Condon and G. Hunt eds, ASP Conference Proceedings, 395, 125.

“ALFALFA: The Search for (Almost) Dark Galaxies and their Space Distribution” Haynes, M.P. 2008, Il Nuovo Cimento B, 122/09-11, 1109.

“HI Content and other Structural Properties of Galaxies in the Virgo Cluster from the Arecibo Legacy Fast ALFA Survey” Gavazzi, G., Giovanelli, R., Haynes, M.P., Fabello, S., Fumagalli, M., Kent, B.R., Koopmann, R.A., Brosch, N., Hoffman, G.L., Salzer, J.J. and Boselli, A. 2008, Astron. Astrophys. 482, 43.

“The Arecibo Legacy Fast ALFA Survey: VI. Second HI Source Catalog of the Virgo Region” Kent, B.R., Giovanelli, R., Haynes, M.P., Martin, A.M., Saintonge, A., Stierwalt, S., Balonek T.J., Brosch, N., and Koopmann, R.A. S 2008, Astro.J. 136, 713.

“A 500 kpc Tail of the Virgo Pair NGC4532/DDO137 Detected by the Arecibo Legacy Fast ALFA (ALFALFA) Survey” Koopmann, R.A., Giovanelli, R., Haynes, M.P., Kent, B.R., Balonek, T.J., Brosch, N., Salzer, J.J. and Spector, O. 2008, Astrophys. J. (Lett.), 682, L85.

“HI Clouds in the Proximity of M33” Grossi, M., Giovanardi, C., Corbelli, E., Giovanelli, R., Haynes, M.P., Martin, A., Saintonge, A. and Dowell, J. 2008, Astron. Astrophys. 487, 161.

“The Arecibo Legacy Fast ALFA (ALFALFA) Extragalactic HI Survey” Haynes, M.P. and the ALFALFA Team 2008 in ”The Evolution of Galaxies through the Neutral Hydrogen Window”, R. Minchin and E. Momjian eds., AIP Conference Proceedings 1035, 238.

“Conference Summary: HI Science in the Next Decade” Haynes, M.P. 2008 in ”The Evolution of Galaxies through the Neutral Hydrogen Window”, R. Minchin and E. Momjian eds., AIP Conference Proceedings 1035, 337.

“A Pilot Survey of HI in Field Galaxies at Redshift $z \sim 0.2$ ” Catinella, B., Haynes, M.P., Giovanelli, R., Gardner, J.P. and Connolly, A.J. 2008, Astrophys. J.(Lett.) 685, L13.

“The Arecibo Legacy Fast ALFA Survey VII: A Neutral Hydrogen Cloud Complex in the Virgo Cluster” Kent, B.R., Spekkens, K., Giovanelli, R., Haynes, M.P., Momjian, E., Cortes, J.R., Hardy, E. and West, A. 2009, Astrophys. J. 691, 1595.

“ Λ CDM Satellites and HI Companions – The Arecibo ALFA Survey of NGC 2903” Irwin, J.A., Hoffman, G.L., Spekkens, K., Haynes, M.P., Giovanelli, R., Linder, S., Catinella, B., Momjian, E., Koribalski, B.S., Davies, J., Brinks, E., de Blok, W.J.G., Putman, M.E. and van Driel, W. 2009, Astrophys. J. 692, 1447

“The HI Content of Early-Type Galaxies from the ALFALFA Survey: II. The Case of Low Density Environments” Grossi M., di Serego Alighieri S., Giovanardi C., Gavazzi G., Giovanelli R., Haynes M. P., Kent B. R., Pellegrini S., Stierwalt S., Trinchieri G., 2009, Astron. Astrophys. 498, 407.

“The Arecibo Legacy Fast ALFA Survey: VIII. HI Source Catalog of the Anti-Virgo Region at Decl. = $+25^\circ$ ” Martin, A.M., Giovanelli, R., Haynes, M.P., Saintonge, A., Hoffman, G.L., Kent, B.R. and Stierwalt, S. 2009, Astrophys. J. Suppl. 138, 338.

“The Arecibo Legacy Fast ALFA Survey: IX. The Leo Region HI Catalog, Group Membership and the HI Mass Function for the Leo I Group” Stierwalt, S., Haynes, M.P., Giovanelli, R., Kent, B.R., Martin, A.M., Saintonge, A., Karachentsev, I.D. and Karachentseva, V.E. 2009, Astro. J. 183, 214.

“ Are Newly Discovered HI High Velocity Clouds Minihalos in the Local Group?” Giovanelli, R., Haynes, M.P., Kent, B.R. and Adams, E.A.K. 2010, Astrophys. J.(Lett). 708, L22.

“The GALEX Arecibo SDSS Survey. I. Gas Fraction Scaling Relations of Massive Galaxies and First Data Release” Catinella, B., Schiminovich, D., Kauffmann, G., Fabello, S., Wang, J., Hummels,

C., Lemonias, J., Moran, S.M., Wu, R., Giovanelli, R., Haynes, M.P., Heckman, T.M., Basu-Zych, A.R., Blanton, M.R., Brinchmann, J., Budavári, T., Gonçalves, T., Johnson, B.D., Kennicutt, R.C., Madore, B.F., Martin, C.D., Rich, M.R., Tacconi, L.J., Thilker, D.A., Wild, V. and Wyder, T.K. 2010, Mon. Not. Royal Astr. Soc. 403, 683.

“The GALEX Arecibo SDSS Survey. II. The Star Formation Efficiency of Massive Galaxies” Schiminovich, D., Catinella, B., Kauffmann, G., Fabello, S., Wang, J., Hummels, C., Lemonias, J., Moran, S.M., Wu, R., Giovanelli, R., Haynes, M.P., Heckman, T.M., Basu-Zych, A.R., Blanton, M.R., Brinchmann, J., Budavári, T., Gonçalves, T., Johnson, B.D., Kennicutt, R.C., Madore, B.F., Martin, C.D., Rich, M.R., Tacconi, L.J., Thilker, D.A., Wild, V. and Wyder, T.K. 2010, Mon. Not. Royal Astr. Soc. 408, 919.

“UGC8802: A Massive Disk Galaxy in Formation” Moran, S.M., Kauffmann, G., Heckman, T.M., Gracia-Carpio, J., Saintonge, A., Catinella, B., Wang, J., Chen, Y.-M., Tacconi, L., Schiminovich, D., Cox, P., Giovanelli, R., Haynes, M. and Kramer, C. 2010, Astrophys. J. 720, 1126.

“The Arecibo Legacy Fast ALFA Survey: X. The HI Mass Function and Ω_{HI} from the 40% ALFALFA Survey” Martin, A.M., Papastergis, E., Giovanelli, R., Haynes, M.P., Springob, C.M. and Stierwalt, S. 2010, Astrophys. J. 723, 1359.

“ALFALFA HI Data Stacking I: Does the Bulge Quench Ongoing Star Formation in Early-Type Galaxies?” Fabello, S., Catinella, B., Giovanelli, R., Kauffmann, G., Haynes, M.P., Heckman, T.M. and Schiminovich, D. 2010, Mon. Not. Royal Astr. Soc. 411, 993.

“Learning Astronomy through Writing” Haynes, M.P. 2010, in *Science and the Educated American: A Core Component of Liberal Education*, ed. John G. Hildebrand and Jerrold Meinwald (Cambridge, Mass.: American Academy of Arts and Sciences) pp. 130-150.

“The GALEX Ultraviolet Virgo Cluster Survey (GUViCS). I: The UV luminosity function of the central 12 sq.deg” Boselli, A., Bossier, S., Heinis, S., Cortese, L., Ilbert, O., Hughes, T., Cucciati, O., Davies, J., Ferrarese, L., Giovanelli, R., Haynes, M.P., Baes, M., Balkowski, C., Brosch, N., Chapman, S.C., Charmandaris, V., Clemens, M.S., Dariush, A., De Looze, I., di Serego Alighieri, S., Duc, P.-A., Durrell, P.R., Emsellem, E., Erben, T., Fritz, J., Garcia-Appadoo, D.A., Gavazzi, G., Grossi, M., Jordan, A., Hess, K.M., Huertas-Company, M., Hunt, L.K., Kent, B.R., Lambas, D.G., Lancon, A., MacArthur, L.A., Madden, S.C., Magrini, L., Mei, S., Momjian, E., Olowin, R.P., Papastergis, E., Smith, M.W.L., Solanes, J.M., Spector, O., Spekkens, K., Taylor, J.E., Valotto, C., van Driel, W., Verstappen, J., Vlahakis, C., Vollmer, B., Xilouris, E.M. 2011, Astron. Astrophys. 528, 107.

“The GALEX Arecibo SDSS Survey: III. Evidence for the Inside-Out Formation of Galactic Disks” Wang, J., Kauffmann, G., Overzier, R., Catinella, B., Schiminovich, D., Heckman, T.M., Moran, S.M., Haynes, M.P., Giovanelli, R. and Kong, X. 2010, Mon. Not. Royal Astr. Soc. (in press).

“HI Content and Optical Properties of Field Galaxies from the ALFALFA Survey. I. Selection of a Control Sample” Toribio, M.C., Solanes, J.M., Giovanelli, R., Haynes, M.P. and Masters, K.L. 2011, Astrophys. J. 732, 92.

“HI Content and Optical Properties of Field Galaxies from the ALFALFA Survey. II. Multivariate Analysis of a Galaxy Sample in Low Density Environments” Toribio, M.C., Solanes, J.M.,

Giovanelli, R., Haynes, M.P. and Martin, A.M. 2011, *Astrophys. J.* 732, 93.

“COLD GASS, an IRAM Legacy Survey of Molecular Gas in Massive Galaxies: I. Relations between H₂, HI, Stellar Content and Structural Properties” Saintonge, A., Kauffmann, G., Kramer, C., Tacconi, L.J., Buchbender, C., Catinella, B., Graciá-Carpio, J., Wang, J., Cortese, L., Fabello, S., Fu, J., Genzel, R., Giovanelli, R., Gui, Q., Haynes, M.P., Heckman, T.M., Krumholz, M.R., Li, Cheng, Moran, S., Rodriguez-Fernandez, N., Schiminovich, D., Schuster, K. and Sievers, A. 2010, *Mon. Not. Royal Astr. Soc.* 415, 32.

“COLD GASS, an IRAM Legacy Survey of Molecular Gas in Massive Galaxies: II. The Non-Universality of the Molecular Gas Depletion Timescale” Saintonge, A., Kauffmann, G., Wang, J., Kramer, C., Tacconi, L.J., Gracia-Carpio, J., Moran, S., Buchbender, C., Catinella, B., Cortese, L., Fabello, S., Genzel, R., Giovanelli, R., Gui, Q., Haynes, M.P., Heckman, T.M., Li, C., Rodriguez-Fernandez, N., Schiminovich, D., Schuster, K. and Sievers, A. 2011, *Mon. Not. Royal Astr. Soc.* 415, 61.

“ALFALFA HI Data Stacking II. HI Content of the Host Galaxies of AGN” Fabello, S., Kauffmann, G., Catinella, B., Giovanelli, R., Haynes, M.P., Heckman, T.M. and Schiminovich, D. 2011, *Mon. Not. Royal Astr. Soc.* 416, 1739.

“The Velocity Width Function of Galaxies from the 40% ALFALFA Survey: Shedding Light on the CDM Overabundance Problem” Papastergis, E., Martin, A.M., Giovanelli, R. and Haynes, M.P. 2010, *Astrophys. J.* 739, 38.

“The Survey of HI in Extremely Low-Mass Dwarfs (SHIELD)” Cannon, J.M., Giovanelli, R., Haynes, M.P., Janowiecki, S., Parker, A., Salzer, J.J., Adams, E.A.K., Engstrom, E., Huang, S., McQuinn, K.K.B.W., Ott, J., Saintonge, A., Skillman, E.D., Allan, J., Erny, G., Fliss, P., and Smith, A., 2011, *Astrophys. J. (Lett.)* 739, L22.

“The ALFALFA HI Absorption Pilot Survey: A Wide-Area Blind Damped Lyman Alpha System Survey of the Local Universe” Darling, J., Macdonald, E.P., Haynes, M.P. and Giovanelli, R. 2011, *Astrophys. J.* (in press).

“The Arecibo Legacy Fast ALFA Survey: The α .40 HI Source Catalog, its Characteristics and their Impact on the Derivation of the HI Mass Function” Haynes, M.P., Giovanelli, R., Martin, A.M., Hess, K.M., Saintonge, A., Adams, E.A.K., Hallenbeck, G., Hoffman, G.L., Huang, S., Kent, B.R., Koopmann, R.A., Papastergis, E., Stierwalt, S., Balonek, T.J., Craig, D.W., Higdon, S.J.U., Kornreich, D.A., Miller, J.R., O’Donoghue, A.A., Olwin, R.P., Rosenberg, J.L. Troischt, P. and Wilcots, E.M. 2011, *Astron. J.* 142, 170.

“The GALEX Arecibo SDSS Survey. IV. Baryonic Mass-Velocity-Size Relations of Massive Galaxies” Catinella, B., Kauffmann, G., Schiminovich, D., Lemonias, J., Scannapieco, C., Wang, J., Fabello, S., Hummels, C., Moran, S.M., Wu, R., Cooper, A.P., Giovanelli, R., Haynes, M.P., Heckman, T.M., and Saintonge, A. 2011, *Mon. Not. Royal Astr. Soc.* (in press).

“Gas, Stars and Star Formation in ALFALFA Dwarf Galaxies” Huang, S., Haynes, M.P., Giovanelli, R., Brinchmann, J., Stierwalt, S. and Neff, S.G. 2011, *Astron. J.* (submitted).